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|                               |                        |                      |  |
|-------------------------------|------------------------|----------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b>  |  |
|                               | 10/512,127             | HASHIMOTODANI ET AL. |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>      |  |
|                               | Thuy V. Tran           | 2821                 |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment submitted on 01/03/2006.
2. ☒ The allowed claim(s) is/are 1-3, 5-7 and 10-14.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

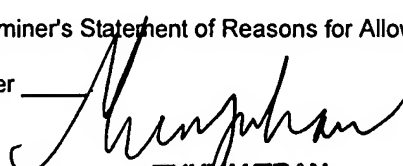
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>01/03/2005</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|--|--|

  
**THUY V. TRAN**  
**PRIMARY EXAMINER**

### **DETAILED ACTION**

This is a response to the Applicants' amendment submitted on 01/03/2006. In virtue of this amendment:

- Claims 4, 8-9, and 15 have been canceled; and thus,
- Claims 1-3, 5-7, and 10-14 are now presented in the instant application.

#### ***Examiner's Amendment***

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

For clarity, the following amendment is made to update the related data of the instant application including:

In the specification, in page 1, after the title and before "FIELD OF THE INVENTION", the following has been inserted:

--This Application is a National Phase Application under 35 U.S.C. 371 claiming the benefit of PCT/JP03/08447 filed on 07/02/2003, which has the priority based on Application No. Japan 2002-192881 filed on 07/02/2002.--

#### ***Allowable Subject Matter***

2. Claims 1-3, 5-7, and 10-14 are allowed.

#### ***Reasons for Allowance***

3. The following is an examiner's statement of reasons for allowance:

Prior art fails to disclose or fairly suggest:

- A compact self-ballasted electrode-less discharge lamp wherein a center portion of a portion around which the coil is wound in the longitudinal direction of the core is positioned within a range that is apart from a plane on which the largest diameter of the bulb is located by a distance from not less than 8mm to not more than 20mm toward the ballast circuit side, in combination with the remaining claimed limitations as called for in independent claim 1 (claims 2-3 are allowed since they are dependent on claim 1);
- A compact self-ballasted electrode-less discharge lamp wherein: a largest diameter of the bulb is set in a range from not less than 55 mm to not more than 75 mm; a bulb wall loading of the bulb during a stable lighting operation is set in a range from not less than 0.05 W/cm<sup>2</sup> to less than 0.07 W/cm<sup>2</sup>; a ratio (h/D) of a height (h) of the bulb based upon an end face of the opening section in the recessed portion to the largest diameter (D) of the bulb is set in a range from not less than 1.0 to not more than 1.3; and the excitation coil is constituted by a core and a coil wound around the core; and a center portion of a portion around which the coil is wound in the longitudinal direction of the core is virtually positioned on a plane within which the largest diameter of the bulb is located, in combination with the remaining claimed limitations as called for in independent claim 5 (claims 6-7 and 10-12 are allowed since they are dependent on claim 5);
- An electrodeless discharge lamp lighting device wherein the diameter D<sub>c</sub> of a portion positioned on the side opposite to the opening section of the recessed portion is greater than the diameter of a portion corresponding to virtually a center portion of

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the recessed portion in the longitudinal direction of the excitation coil, in combination with the remaining claimed limitations as called for in independent claim 13; and

- An electrodeless discharge lamp lighting device wherein the diameter  $D_c$  of a portion positioned on the side opposite to the opening section of the recessed portion is greater than the diameter of a portion corresponding to virtually a center portion of the recessed portion in the longitudinal direction of the excitation coil, in combination with the remaining claimed limitations as called for in independent claim 14.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Inquiry*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -5:00 PM).

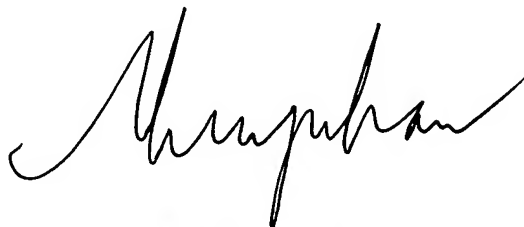
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

02/20/2006

A handwritten signature in black ink, appearing to read 'Thuy V. Tran', with a stylized, cursive script.

**THUY V. TRAN  
PRIMARY EXAMINER**

### **AMENDMENTS TO THE DRAWINGS**

The attached "Replacement Sheets" of drawings include changes to Figures 12 and 13. The attached "Replacement Sheets," which include Figures 12 and 13 and label them as "Prior Art", replaces the original sheets including Figures 12 and 13.

Attachment: Replacement Sheet(s) 12/14 and 13/14

FIG. 1

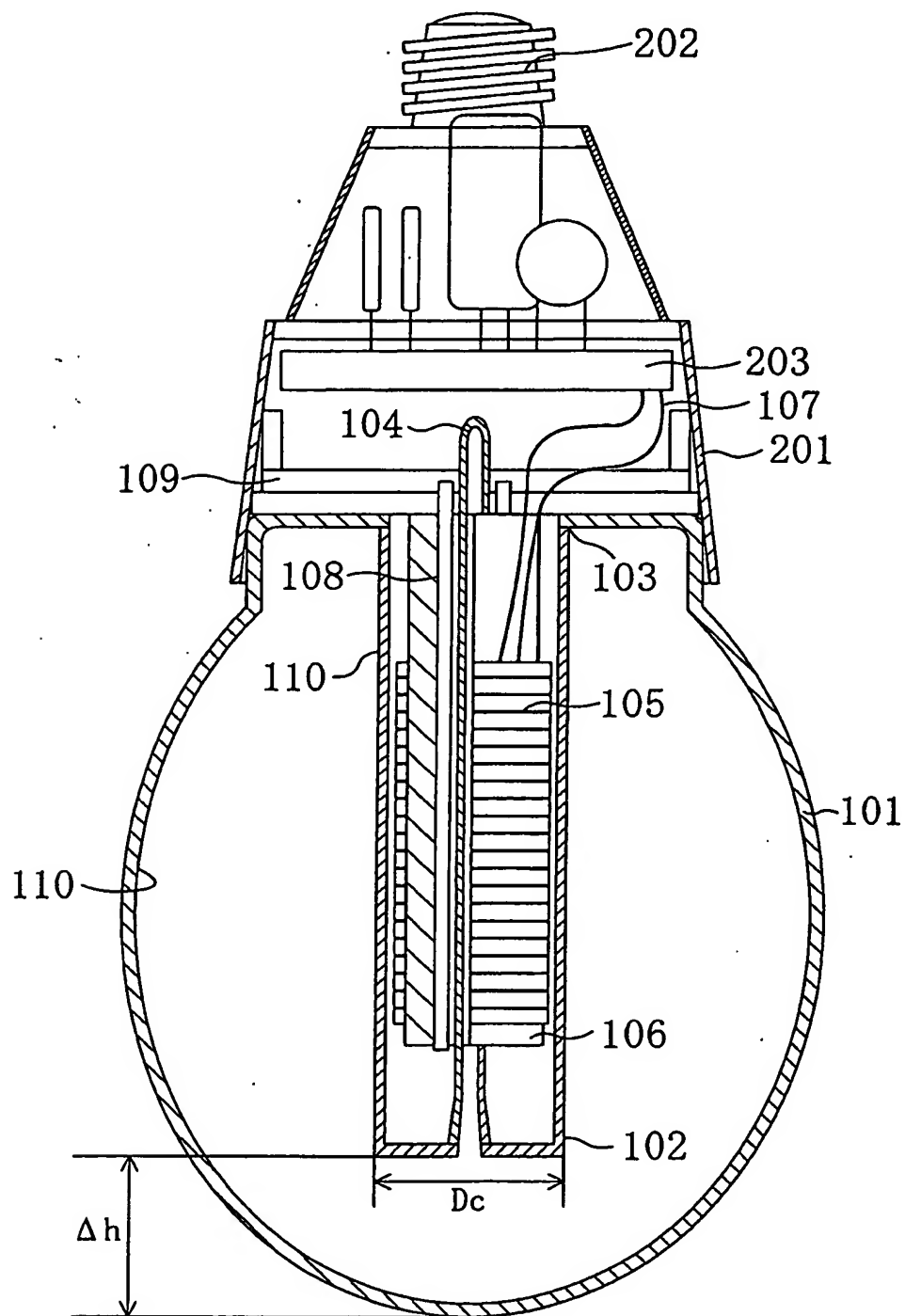


FIG. 2

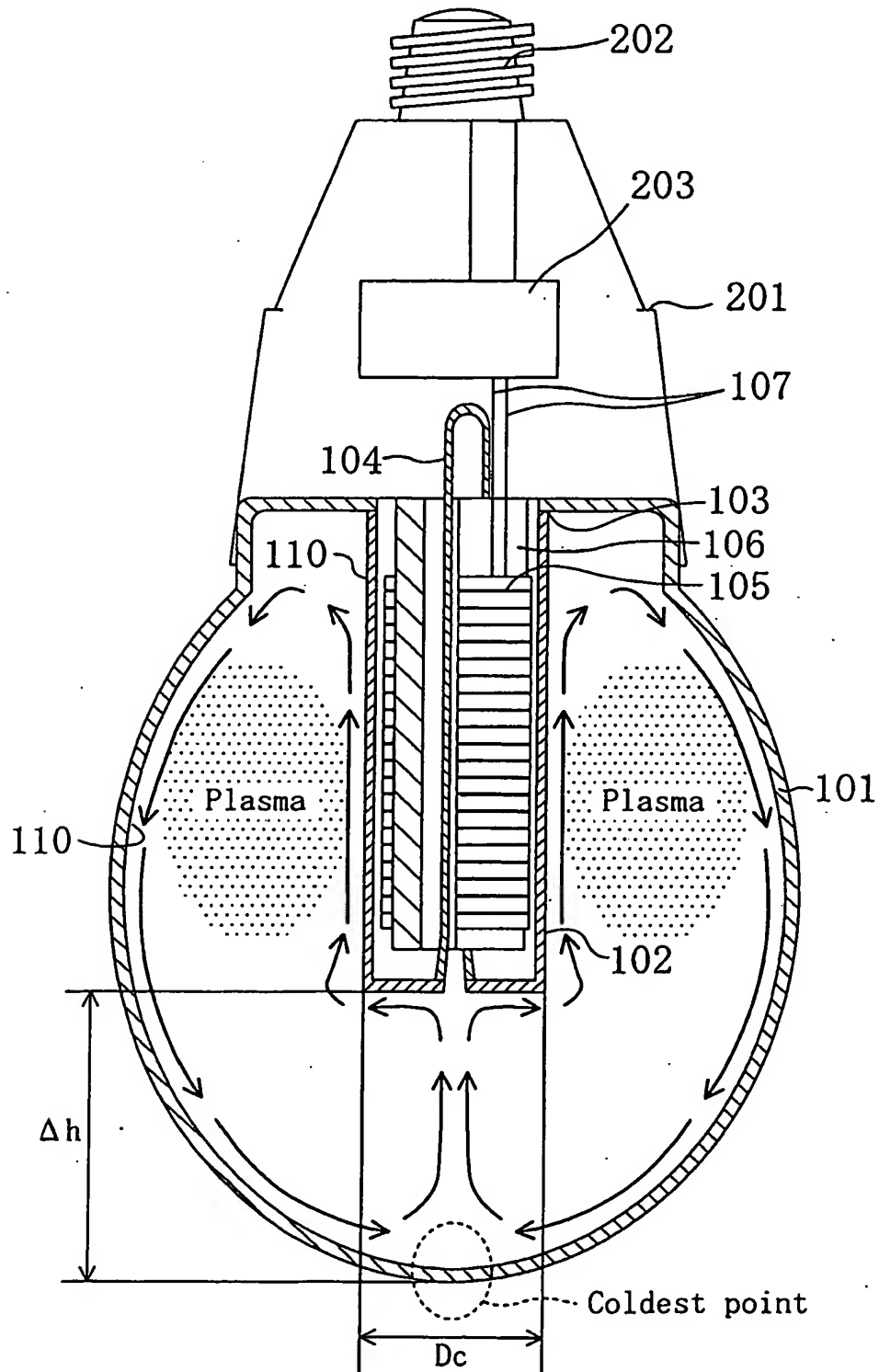




FIG. 3

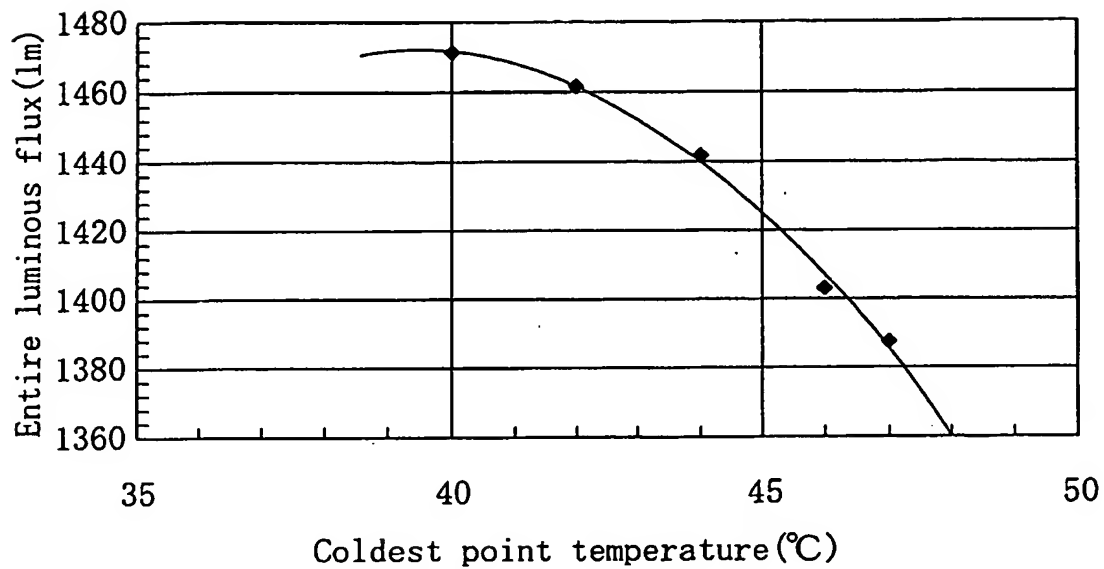


FIG. 4

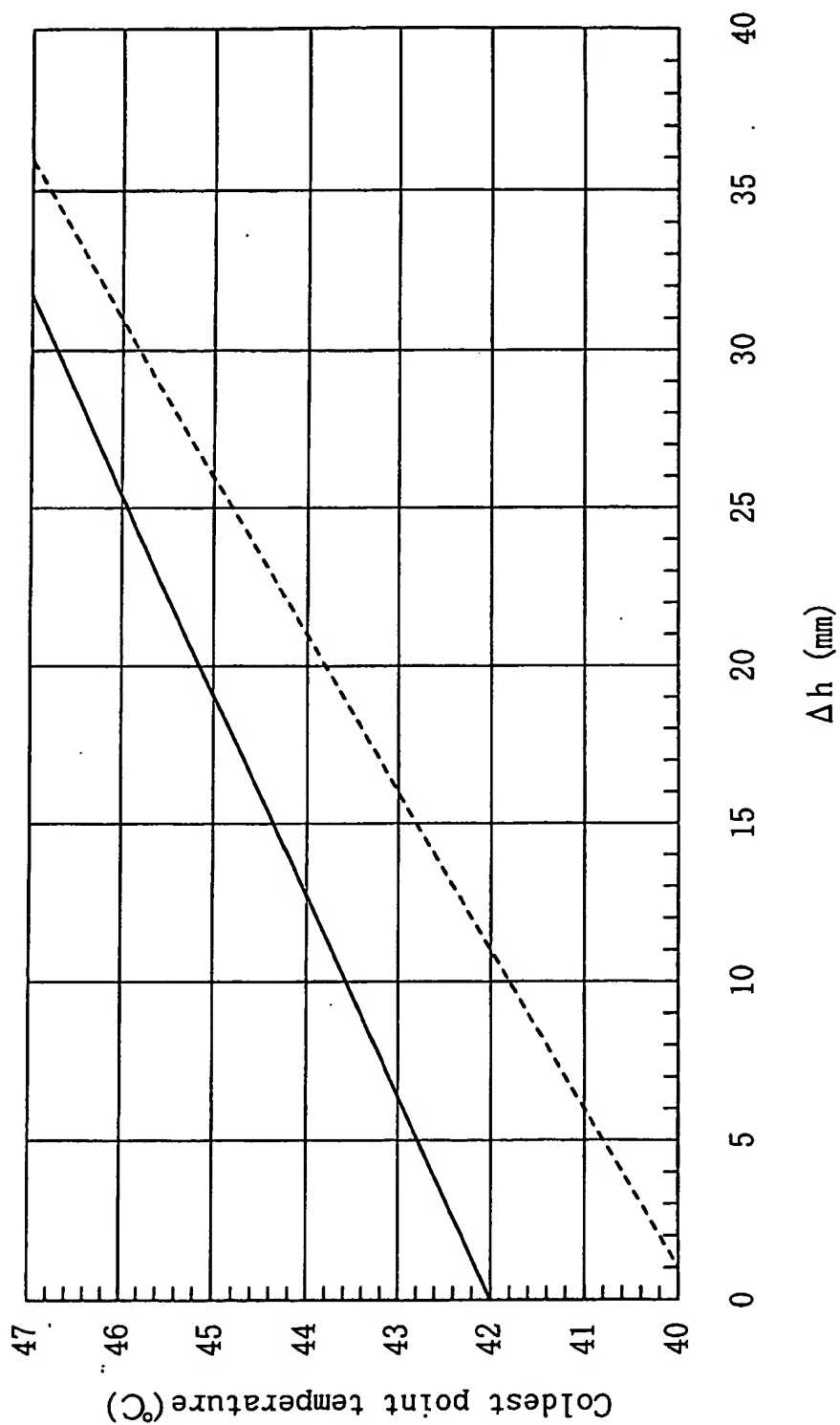
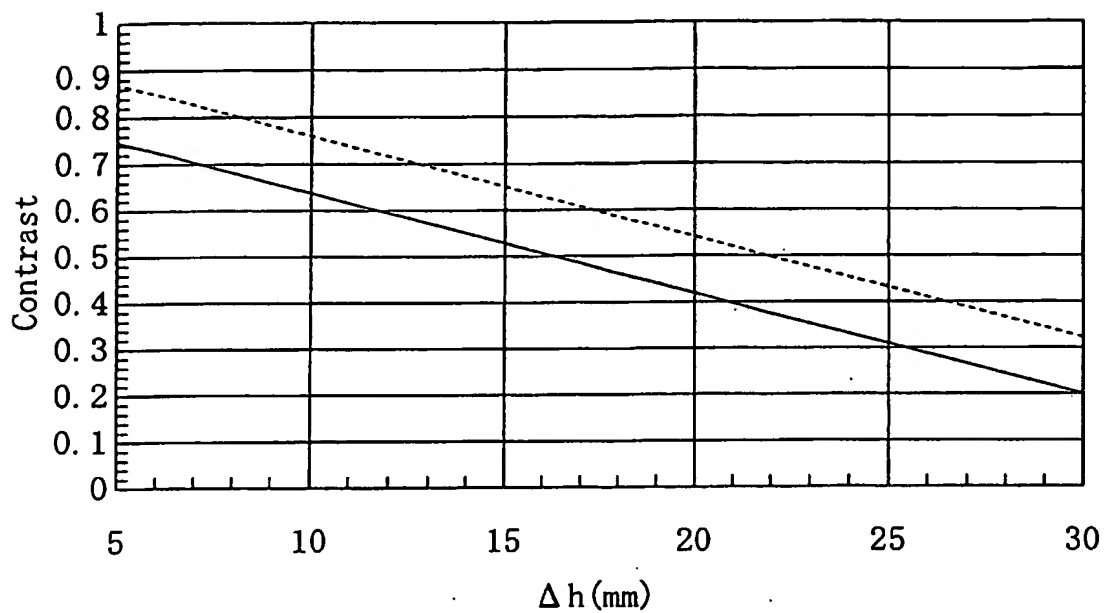
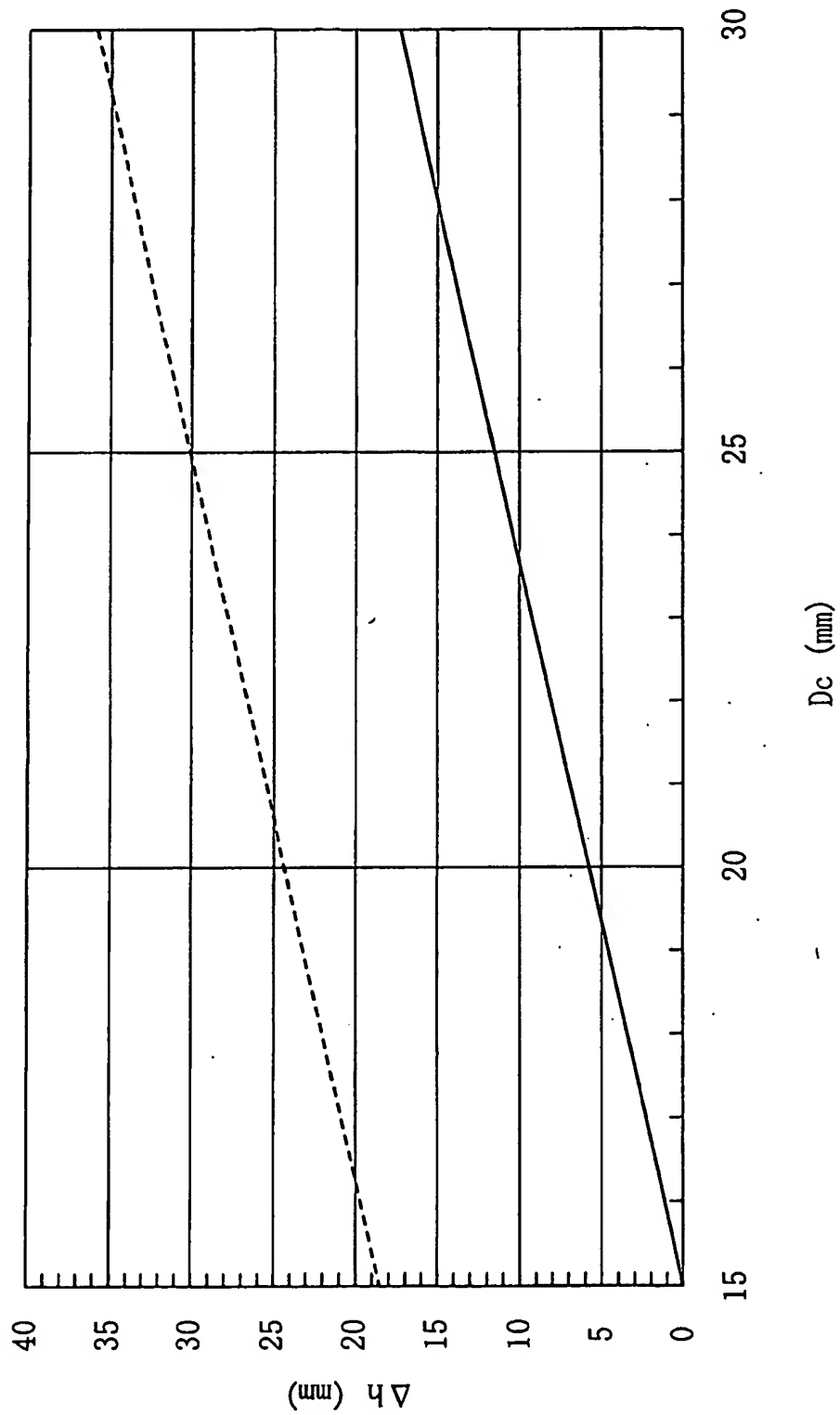


FIG. 5



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FIG. 6



Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND  
ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE

Inventors: Kiyoshi HASHIMOTODANI, et al.

Atty. Ref.: 5077-000225/NP

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FIG. 7

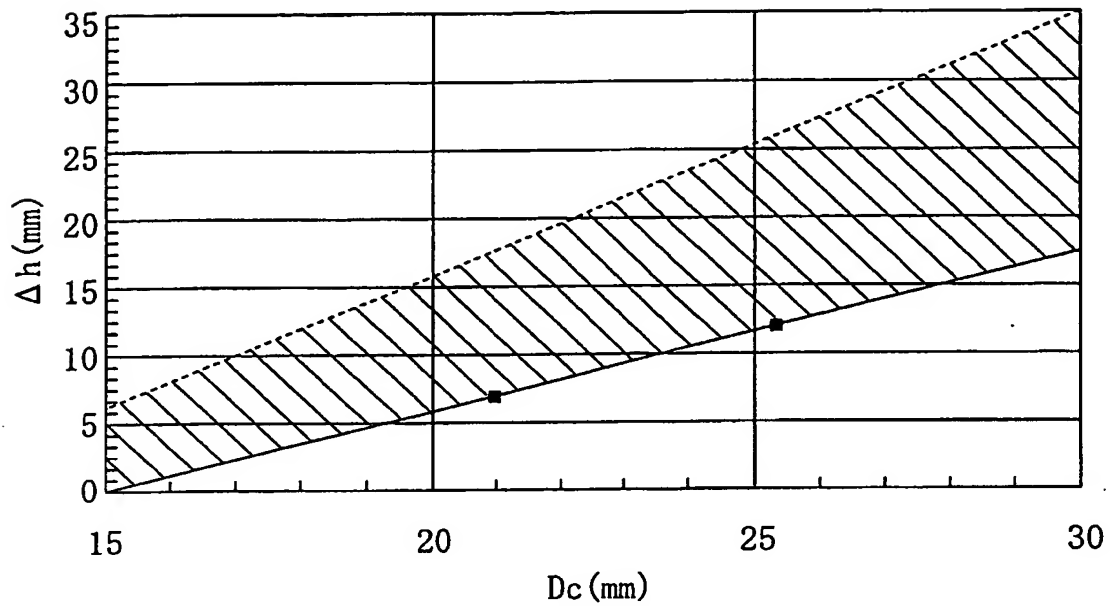


FIG. 8

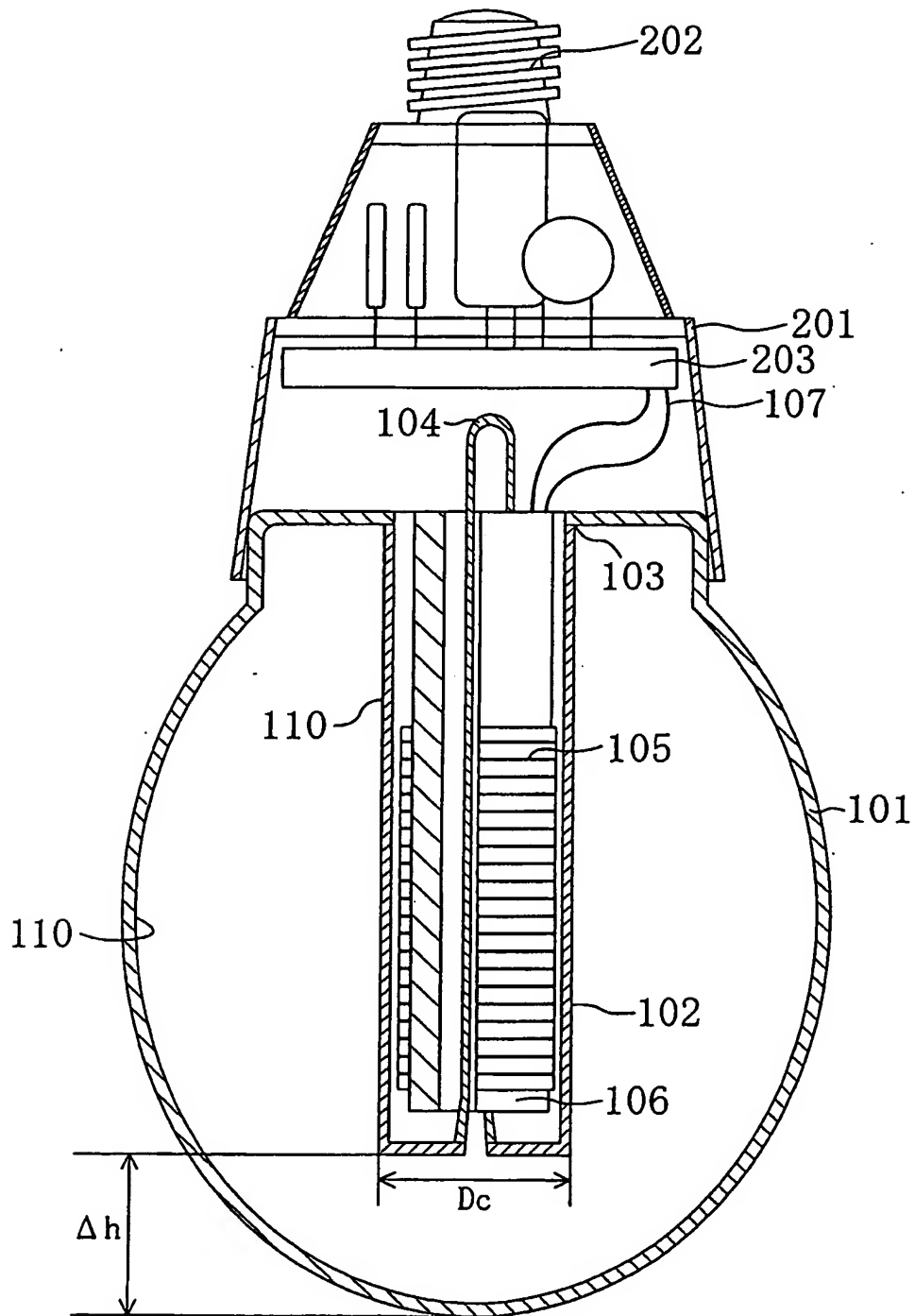
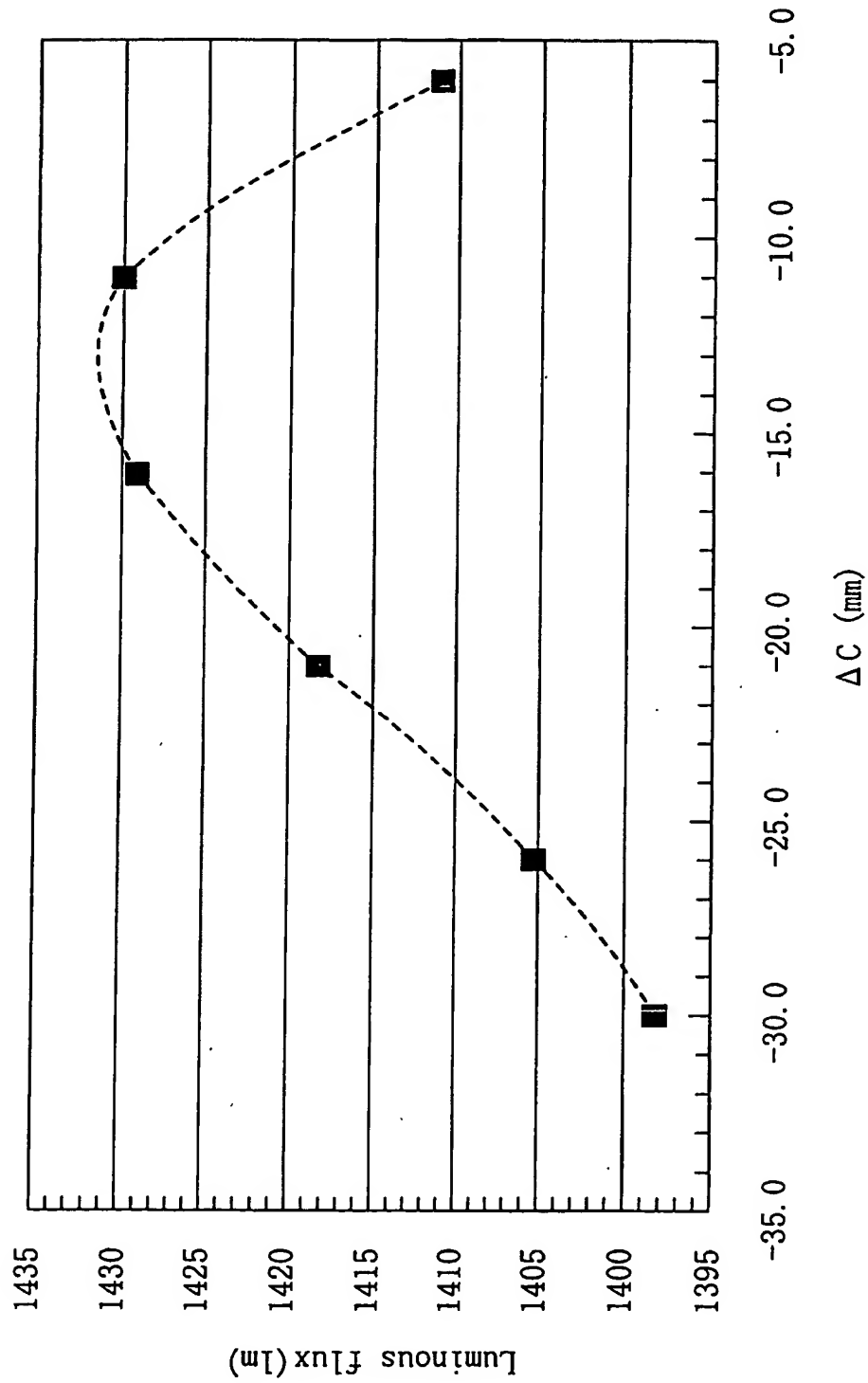


FIG. 9



Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND  
ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE

Inventors: Kiyoshi HASHIMOTODANI, et al.

Atty. Ref.: 5077-000225/NP

10/512127

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FIG. 10

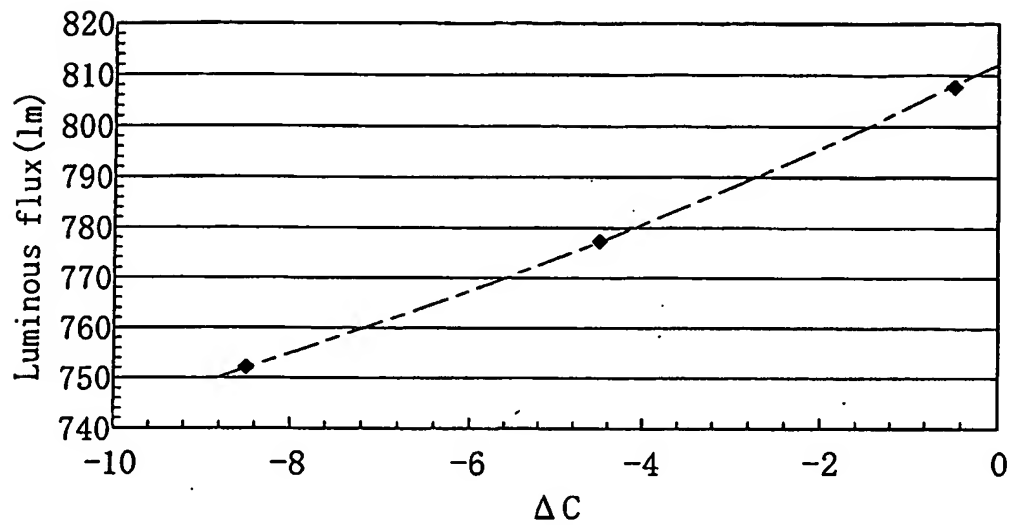
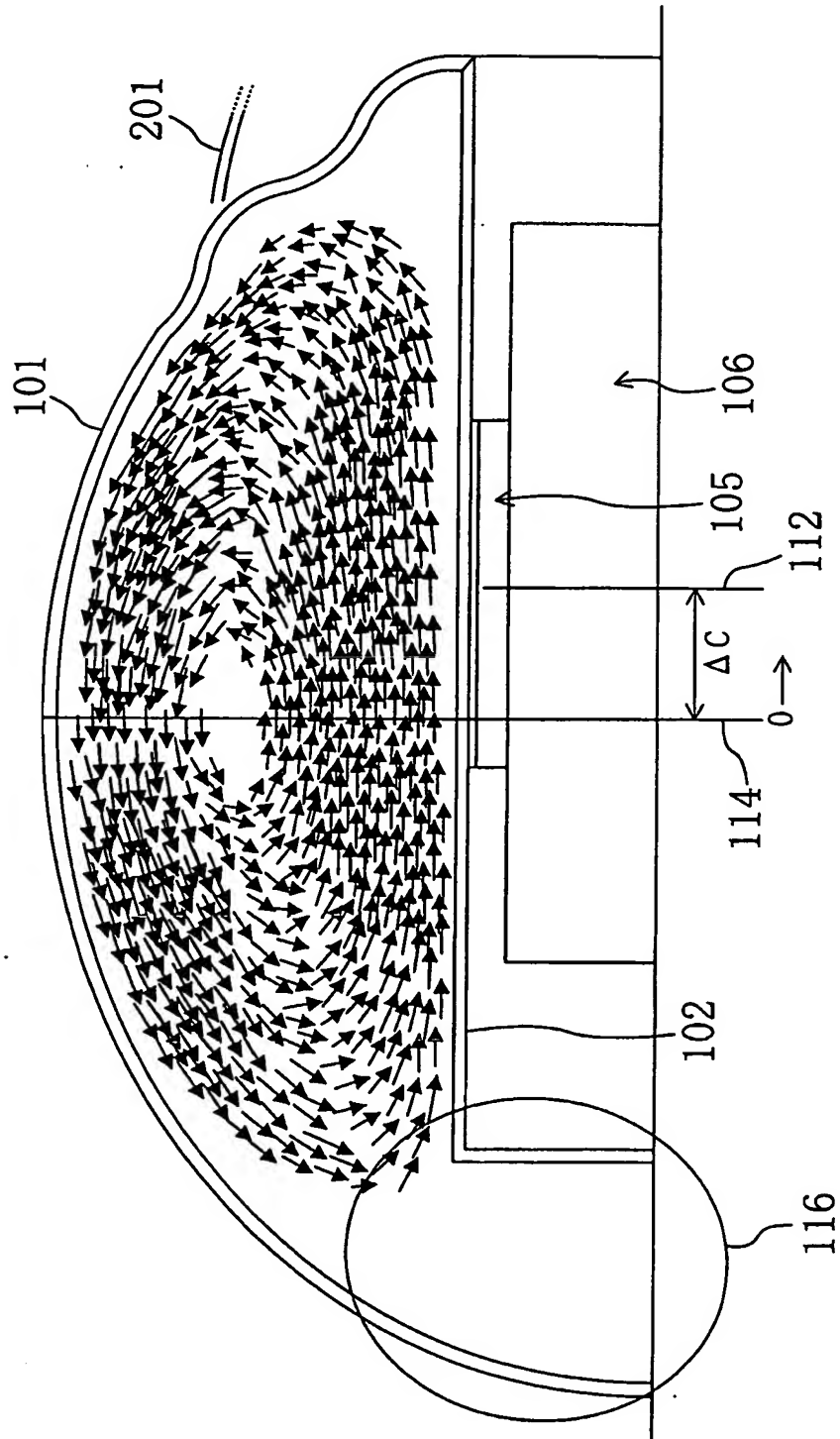




FIG. 11



Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND  
ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE

Inventors: Kiyoshi HASHIMOTODANI, et al.

Atty. Ref.: 5077-000225/NP

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FIG. 12

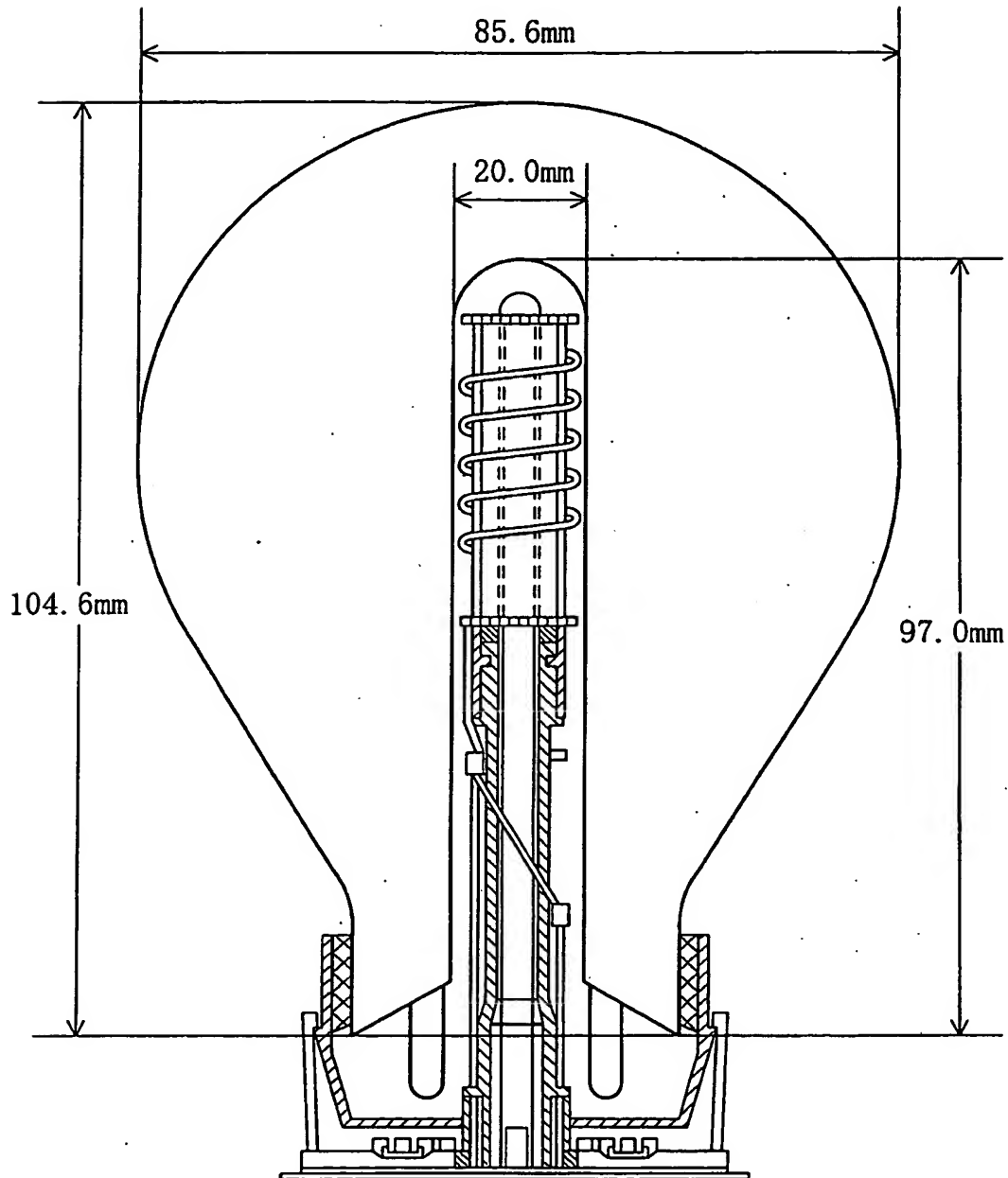
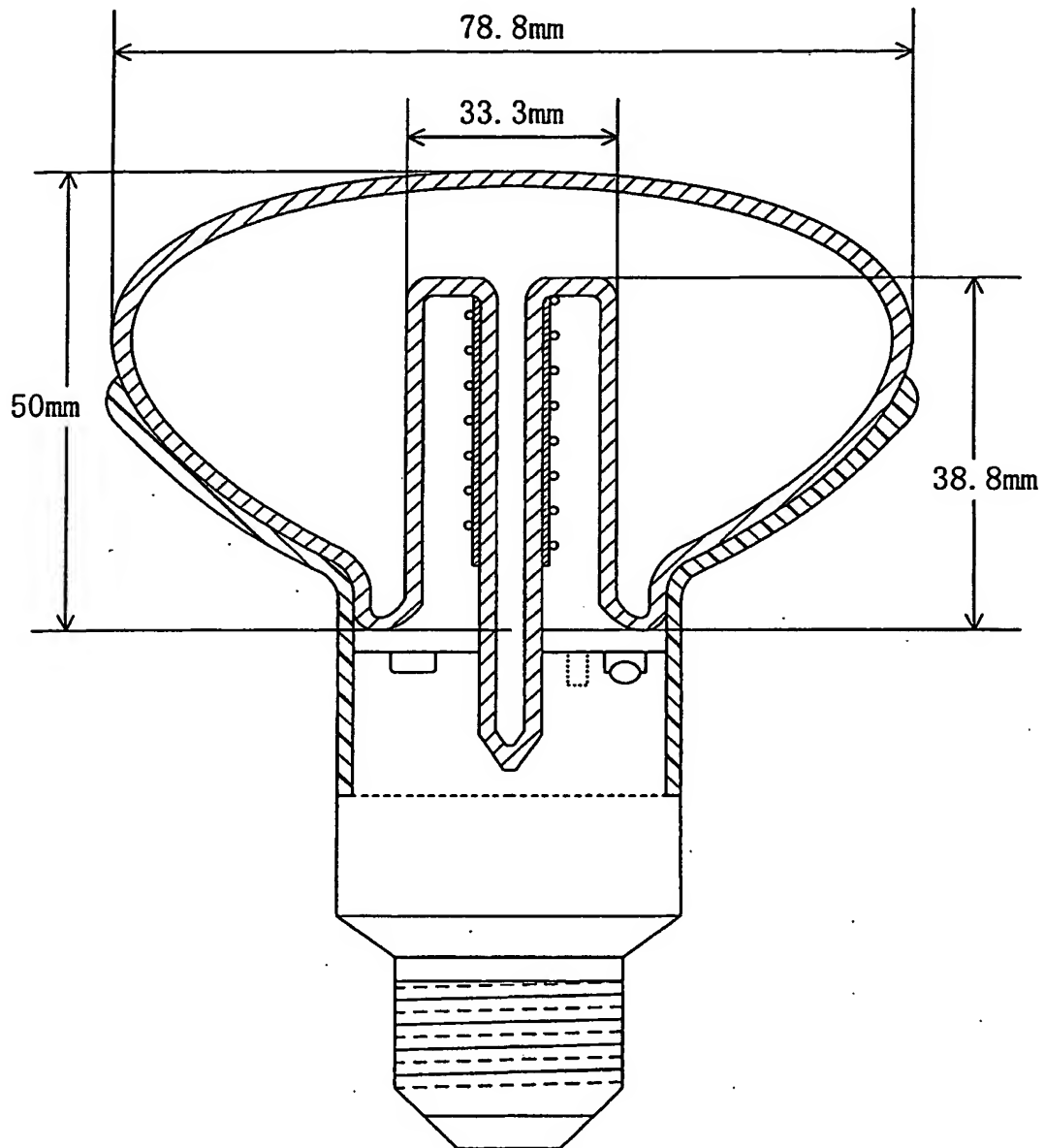


FIG. 13



Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND  
ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE

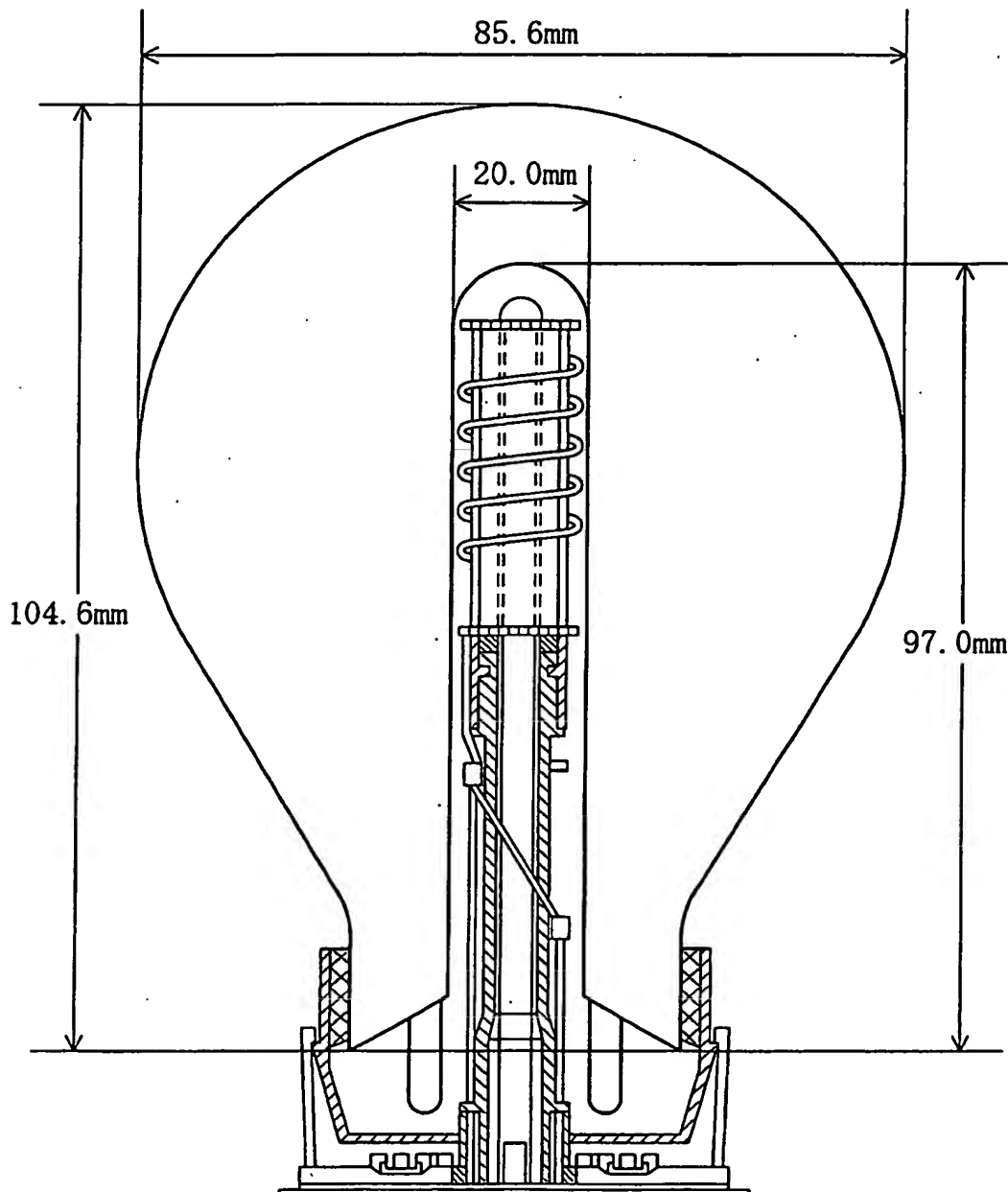
Inventors: Kiyoshi HASHIMOTODANI, et al.

Atty. Ref.: 5077-000225/NP  
REPLACEMENT SHEET

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FIG. 12  
PRIOR ART



Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND  
ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE

Inventors: Kiyoshi HASHIMOTODANI, et al.

Attorney: 5077-000225/NP  
REPLACEMENT SHEET

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FIG. 13  
PRIOR ART

